5.   (Amended) The computerized method of claim 1, wherein processing the SFS data and the range data to generate the at least one three-dimensional images [the generating further] comprises:

[generating shape-from-shading data from the plurality of two-dimensional images using a shape-from-shading process, the shape-from-shading data comprising a first plurality of three-dimensional points;

generating range data comprising a second plurality of three-dimensional points from the plurality of two-dimensional images using a range-data process;]

fusing the range data to the shape-from-shading data, yielding fused data comprising a third plurality of three-dimensional points;

registering the fused data, yielding registered data comprising a fourth plurality of three-dimensional points; and

triangulating the registered data, yielding the at least one three-dimensional image of the oral cavity.

8.   (Amended) A computer-readable medium having computer-executable instructions to cause a computer to perform a method comprising:

receiving a plurality of two-dimensional optical images of an oral cavity; and

generating at least one three-dimensional image of the oral cavity from the plurality of two-dimensional images, including:

generating shape-from-shading (SFS) data and range data using the plurality of two-dimensional images; and

processing the SFS data and the range data to generate the at least one three-dimensional image.

11.   (Amended) The computerized method of claim 8, wherein processing the SFS data and the range data to generate the at least one three-dimensional images [the generating further] comprises:

[generating shape-from-shading data from the plurality of two-dimensional images using a shape-from-shading process, the shape-from-shading data comprising a first plurality of three-dimensional points;

generating range data comprising a second plurality of three-dimensional points from the plurality of two-dimensional images using a range-data process;]

fusing the range data to the shape-from-shading data, yielding fused data comprising a third plurality of three-dimensional points;

registering the fused data, yielding registered data comprising a fourth plurality of three-dimensional points; and

triangulating the registered data, yielding the at least one three-dimensional image of the oral cavity.

20.   (Amended) The computerized system of claim 17, the computer further comprises:

a computer readable medium comprising means of:

generating shape-from-shading data from the plurality of two-dimensional images using a shape-from-shading process, the shape-from-shading data comprising a first plurality of three-dimensional points;

generating range data comprising a second plurality of three-dimensional points from the plurality of two-dimensional images using a range-data process;

fusing the range data to the shape-from-shading data, yielding fused data comprising a third plurality of three-dimensional points;

registering the fused data, yielding registered data comprising a fourth plurality of three-dimensional points; and

triangulating the registered data, yielding the [one] image of the three-dimensional [image of the oral cavity] model.

Please add the following new claims:

21.   (New) A computerized method for dental imaging comprising:

receiving a plurality of two-dimensional images of a oral cavity; and

generating shape-from-shading data from the plurality of two-dimensional images using a shape-from-shading process, the shape-from-shading data comprising a first plurality of three-dimensional points; and

generating range data comprising a second plurality of three-dimensional points from the plurality of two-dimensional images using a range-data process;

fusing the range data to the shape-from-shading data, yielding fused data comprising a third plurality of three-dimensional points;

registering the fused data, yielding registered data comprising a fourth plurality of three-dimensional points; and

triangulating the registered data, yielding at least one three-dimensional image of the oral cavity.

22.   (New) The computerized method of claim 21, wherein the generating shape-from-shading data further comprises:

estimating the direction of the illuminant from the plurality of two-dimensional images, in reference to camera intrinsic parameters; and

determining a solution to a brightness equation, yielding the shape-from-shading data comprising a first plurality of three-dimensional points.

23.   (New) The computerized method of claim 21, wherein the fusing the range data to the shape-from-shading data further comprises:

calculating the error difference in available depth measurements of the range data and the shape-from-shading data;

approximating a surface the fits the error difference, yielding an approximated surface; and

correcting the shape-from-shading data from the approximated surface, yielding fused data comprising a third plurality of three-dimensional points;

24.   (New) A computer-readable medium having computer-executable instructions to cause a computer to perform a method comprising:

receiving a plurality of two-dimensional optical images of an oral cavity; and

generating shape-from-shading data from the plurality of two-dimensional images using a shape-from-shading process, the shape-from-shading data comprising a first plurality of three-dimensional points;